Reference:	SPA013
Job Title:	Project Engineer (1 position available)
Company:	ESR Technology Ltd
Location:	Birchwood Park, Warrington (near Manchester)
Employment Category:	Full time (37.5 hours/week)
Salary/Benefits:	Competitive salary, with excellent benefits including 25 days' annual leave plus statutory holidays, additional leave purchase, up to 8% matched pension contribution, health care, life assurance and more

• Do you hold an HND or degree in mechanical or aerospace engineering, or a similar engineering discipline, with minimum 3 years industrial experience post-graduation.
• Interested in supporting a diverse customer base in the testing and development of their products and technologies for space or vacuum applications?
• Able to take responsibility for all aspects of commercial and R&D test projects as well as for design and oversight of manufacturing and testing of flight mechanisms
• Do you want a varied, challenging and satisfying career working within an internationally renowned team – which involves some working hands-on in cleanroom to analysing data and writing of first-class technical reports, as well as presenting confidently to clients?

The Company
ESR Technology is a leading Science and Engineering services company providing independent and specialist technical consultancy, products and services to rapidly growing Space market, as well as serving the vacuum industry, Oil & Gas, Industrial and Transport markets. We are seeking a highly motivated and technically capable Engineer to join our Mechanism Design Team, within the Space Group. The Space Group encompasses our successful spacecraft mechanism development/assembly team and the research team which runs the European Space Tribology Laboratory (ESTL) on behalf of the European Space Agency (ESA). We need confident, capable staff who take responsibility for their work, have excellent communication skills and want to work on technically challenging projects for international clients.

The Job
This is intended for someone with some relevant engineering experience, to work within the Space Group which provides specialist scientific and engineering support to clients in both space and terrestrial markets, but we will consider more advanced applicants as well based on their merits. Activities include support to commercial R&D activities including liaison with colleagues/clients to identify project scope, all aspects of project delivery (mechanism and test rig facility design, test specifications, commissioning, test execution, troubleshooting, analysis, and reporting of results) supporting major international space and science programmes as well as the growing commercial space and terrestrial vacuum markets. Clients include ESA, major aerospace corporations developing spacecraft and vacuum mechanism/equipment developers and research organisations. Projects vary in size from weeks or months duration up to longer term multi-year projects.

The successful candidate will be expected to demonstrate some specialist knowledge related to the field of mechanism design or tribology, the execution of tasks in a structured manner, including skills for communication of research activities in the context of space or vacuum applications. However, equally important will be demonstrate a broad-based engineering background to enable the effective use of existing technical knowledge including the ability to work hands-on, collaborating with other engineers and technicians as needed, to deliver all aspects of the R&D activities with which they will be tasked.

The abilities both to plan work packages and take responsibility for its completion within a small team and a commercial R&D environment are essential. This requires the employee to understand internal or external customer requirements including our AS9100 design process. The candidate will use their specific technical expertise to contribute to outcomes of a multi-disciplinary team and become responsible for timely and cost-effective task and work package delivery. They will be located at our modern office facility in Warrington, working mainly within the office, but may be tasked to carry out lab-based activities for specific projects and to liaise with clients and suppliers. Some occasional travel may be required to visit clients, suppliers, and other project partners both within the UK and internationally. Depending on the background of the successful candidate, the role will provide opportunities for training in aspects of space tribology, vacuum practices, and other technical and interpersonal skills as required.

Requirements

The successful candidate will need to be self-motivated, able to prioritise work and learn quickly whilst working alongside experienced colleagues. It is essential that the candidate is:

- Technically strong with an enquiring mind, a creative problem-solver willing to learn and to contribute effectively
- Knowledgeable regarding the practical design and analysis of mechanisms relevant to space/aerospace applications
- Able to perform essential project management tasks, leading smaller projects or to as a work package manager within larger projects
- Able to show in-depth experience with detailed modelling of advanced CAD platform and configuration software (Solidworks and PDM is preferable)
- Willing to perform hands-on tasks in a laboratory/cleanroom environment for development projects and to supervise such tasks on flight hardware and test equipment
- Able to assist in the development or and work in-line with dedicated processes or test procedures as required
- Able to multi-task, prioritise and feedback progress and problem areas alike with support from experienced staff.
- An excellent communicator, with strong written and verbal skills - able to contribute to analysis and written reporting of test results.
- A sociable team player, working with a wide range of staff in different areas of the business, dealing effectively with problems and working with other team members (internal or external to ESR) to find constructive solutions.
- Able to demonstrate and adopt a continuous improvement mentality keeping in mind, recommending and implementing more efficient methods where appropriate.

The following skills would be of benefit:

- Experience with FEM analysis of structures or thermal problems would be an asset.
- Some tribological knowledge, background or experience with a working knowledge of ball bearings, gears or other tribological components.
- Experience of assembly/commissioning test facilities (e.g., mechanical assembly, drives and controllers, instrumentation/data acquisition and/or control software preparation, calibration, and validation of data).
- Experience working with high vacuum equipment/systems.
- A good working knowledge, experience or background in ball bearings, gears or other tribological components.
- Some experience in working within either ISO9001 or AS/EN9100:2018 quality management systems

Qualifications
An HND or degree in Mechanical or Aerospace Engineering, or a related discipline.

Travel Requirement
Occasional UK and International travel.

Right to Work
Prospective candidates for this role should be aware that any offer of employment in connection with this vacancy is conditional upon, and subject to the candidate obtaining, and at all times continuing to have, the right to live and work in the United Kingdom.

Application
If you are passionate about delivering outstanding value to our clients and our business, then this could be the role for you. Write to us including your full CV, highlighting what you can contribute in this diverse and interesting role to: careers@esrtechnology.com